



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.                 | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|-------------|----------------------|---------------------|------------------|
| 10/619,032                      | 07/14/2003  | Glenn Morrow         | P1027/15509RRUS     | 6391             |
| 64458                           | 7590        | 07/09/2008           | EXAMINER            |                  |
| Hemingway & Hansen, LLP         |             |                      | LY, ANH VU H        |                  |
| 1717 Main Street                |             |                      |                     |                  |
| Comerica Bank Tower- Suite 2500 |             |                      | ART UNIT            | PAPER NUMBER     |
| Dallas, TX 75201                |             |                      | 2616                |                  |
|                                 |             |                      |                     |                  |
|                                 |             |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|                                 |             |                      | 07/09/2008          | ELECTRONIC       |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

SCOTTHEMINGWAY@HEMLAW.ORG

|                              |                          |                     |  |
|------------------------------|--------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b>   | <b>Applicant(s)</b> |  |
|                              | 10/619,032               | MORROW, GLENN       |  |
|                              | Examiner<br>ANH-VU H. LY | Art Unit<br>2616    |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 31 March 2008.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,2 and 15-20 is/are rejected.

7) Claim(s) 1-20 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/0256/06)  
Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 31, 2008 has been entered.

### ***Claim Objections***

2. Claims 1-20 are objected to because of the following informalities:

With respect to claim 1, in line 1, replace "system" with --network-- since various areas in the body of claim 1 and its dependent claims recite "the network". In line 4, "said slow-path router" lacks antecedent basis. In line 7, replace "the packet" with --a packet--. In lines 10-11, replace "in information packet" with --in said one of the information packets--. In lines 12-13 and 20, replace "the information packet" with --said one of the information packets--. In line 15, replace "the slow-path routing identifier" with --a slow-path routing identifier--. In line 17, replace "the fast-path router" with --a fast-path router--. In line 19, "said fast-path routing devices" lacks antecedent basis.

With respect to claim 2, in line 1, replace "The packet-based communication routing device" with --The packet-based communication network--.

With respect to claim 3, in line 1, replace "The packet-based communication routing device" with --The packet-based communication network--. Further, in line 3, replace "the information packet" with --an information packet--.

With respect to claim 4, in line 1, replace "The packet-based communication routing device" with --The packet-based communication network--. In line 3, replace "the routing device" with --a routing device--. And in lines 3-4, replace "the information packet" with --an information packet--.

With respect to claims 5-7, in line 1, replace "The packet-based communication routing device" with --The packet-based communication network--. Further, in lines 2 and 3, replace "the slow-path routing device" with --a slow-path routing device--.

With respect to claim 8, in line 2, replace "system" with --network-- since various areas in the body of claim 8 recite "the network" thereby overcoming the issue of antecedent basis. In line 14, insert --;-- after "slow-path identifier". In line 23, insert --.-- after "slow-path identifier" to terminate the claim.

With respect to claims 10-12, in line 3, replace "the information packet" with --an information packet--.

With respect to claim 13, in line 3, replace "the information packet" with --an information packet--. Further, insert --.-- after "an interface" to terminate the claim.

With respect to claim 14, in line 3, replace "the information" with --an information packet--.

With respect to claim 15, in line 2, replace "system" with --network-- since various areas in the body of claim 15 recite "the network" thereby overcoming the issue of antecedent basis. In line 3, replace "input of a router" with --input of a slow-path router--.

Claims 9 and 16-20 are objected for the reasons as set forth in objected independent claims 8 and 15. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Craft et al (US Patent No. 7,124,205 B2). Hereinafter, referred to as Craft.

With respect to claim 1, Craft discloses a packet-based communication system having different speed path-rated routing devices (Fig. 1, INIC 22 for fast-path processing and HOST 20 for slow-path processing), comprising:

at least one slow-path routing device on the network (Fig. 1, host 20) having one or more inputs (Fig. 1, inputs of bridge 42) to a slow-path router (Fig. 1, CPU 30) that receive information packets on the network and one or more outputs that transmit information packets onto the network (Fig. 1, outputs of bridge 42), said information packets containing a slow-path identifier that identifies the packets as requiring slow-path routing (col. 36, lines 8-21, if the attention bit from the summary 2224 is a digital one, then processor 780 determines that the packet is not a fast-path candidate. Then the entire packet is passed to a buffer on host 20 for slow-path transport and network layer processing by the protocol stack of host 20. Herein, a zero of the attention bit indicates a slow-path processing);

said slow-path routing device (Fig. 1, host 20) having a first processor on the router coupled to said inputs and said outputs (Fig. 1, CPU 30), said first processor parsing address

header information (Fig. 3, block 108) in one of the information packets including examining one or more flag values in information packet and processing the information packet according to slow-path routing techniques (col. 18, lines 16-37 and Fig. 12, the protocol stack 38 processes packet headers in the slow-path. Herein, the values in the fields of the network layer and transport layer must be examined and processed according to slow-path processing), and transmitting the information packets to one of said outputs (Fig. 1, outputs of bridge 42) for directing to any other slow-path routing device on the network if said information packet possesses the slow-path routing identifier (Fig. 27, another host located in the network 2400 for performing slow-path processing such as host 2407 according to the attention bit);

at least one fast-path routing device on the network (Fig. 1, INIC 22) having one or more inputs to the fast-path router (Fig. 1, inputs PHY 58 coupled to processor 44) to receive information packets on the network (Fig. 1, receive packets from LAN/WAN 25 or Internet 28), said fast path router processing information packets not having the slow-path routing identifier and said fast-path routing devices will not parse header information or analyze the information packet according to slow-path routing requirements (col. 36, line 22 – 24 and Fig. 3, if, on the other hand, the attention bit is a zero, then processor 780 determines that the packet is a fast-path candidate. Herein, as illustrated in block 125, data packets are sent to destinations via fast-path wherein information in higher layers are not processed according to fast-path routing).

With respect to claim 2, Craft discloses that wherein the slow-path router identifier includes a flag value that contains a data element identifying a filtered router alert option (col. 36, lines 8-21, if the attention bit from the summary 2224 is a digital one, then processor 780

determines that the packet is not a fast-path candidate. Then the entire packet is passed to a buffer on host 20 for slow-path transport and network layer processing by the protocol stack of host 20. (Herein, digital one is the filtered router alert option).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 15-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claim 15, the limitation recited in lines 7-10, as amended, "forwarding the information packet to an output on the slow-path router for transmission onto any other slow-path routers on the network if the slow-path identifier value indicates the need for high-level processing by said slow-path routers" is not described or supported by the specification. According to pages 18-19 of the specification, information packets are forwarded to slow-path routers, by the fast-path routers, for further examination if higher level processing required. But the specification does not describe that slow-path routers forward packets to slow-path routers for further examination.

Claims 16-20 are rejected for the reasons as set forth in rejected independent claim 15.

***Allowable Subject Matter***

5. Claims 3-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claims 8-14 contain the allowable subject matter but objected to for minor informalities. The prior art does not teach or fairly suggest checking a slow-path identifier value in the information packet at the first processor of the slow-path router to determine if the information packet requires slow-path processing on the first processor and forwarding the information packet to an output on the fast-path router for transmission to any other slow-path routers on the network if the information packet has a slow path identifier by the fast-path router, as specified in independent claim 8.

***Response to Arguments***

7. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Philbrick et al (US 2005/0204058 A1) discloses method and apparatus for data re-assembly with a high performance network interface.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANH-VU H. LY whose telephone number is (571)272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Avl

/Anh-Vu H Ly/  
Primary Examiner, Art Unit 2616